

## **NEXT GENERATION ACCOUNTABILITY MODEL**

Updated: Dec. 22, 2011, 8:55 a.m.

### **BACKGROUND**

South Dakota began the process of developing a new statewide accountability model in September 2011. The Department of Education assembled a group of 23 individuals representing key stakeholder groups to provide recommendations regarding a next-generation accountability model for South Dakota. Those individuals included: school administrators, teachers, tribal educators, state board members, legislators, and representatives of higher education and state education associations.

To date, the group has met three times. During that time period, the U.S. Department of Education also issued its ESEA Waiver Flexibility package.

The resulting proposed Accountability Model, summarized here, is a product assembled by the South Dakota Department of Education. It is a model intended to be legitimate and fair; useful to educators and administrators; easily understood by the public; and, most importantly, one that promotes continuous improvement for individual students, as well as for schools.

### **SUMMARY**

South Dakota's proposed next generation accountability model takes a thoughtful, balanced approach to defining the indicators of a strong education system. Rather than focusing on student proficiency on a single assessment, it encompasses multiple indicators, including student growth, that are critical pieces in preparing students for the rigors of the 21<sup>st</sup> century world.

The proposed model will continue to hold schools accountable for student proficiency and closing achievement gaps through continued annual public reporting of disaggregated student outcomes in math and reading. However, this more robust model reaches beyond the once-a-year summative assessment, to offer a more credible and meaningful model. The expectation is that the model will be used to inform school administrators, teachers and the public as to how schools *and* individual students are progressing. And with its emphasis on continuous improvement, it sets a high bar for ongoing reflection and goal setting.

The proposed next-generation accountability model is based on the following key indicators:

- 1) Student Achievement
- 2) Academic Growth
- 3) College & Career Readiness (High School) OR Attendance (Elementary and Middle School)
- 4) Effective Teachers and Principals
- 5) School Climate



## OVERVIEW

The proposed accountability model uses a 100-point index, called the School Performance Index. A numeric value will be assigned to each of the five indicators on the Index. These values will be added to create a final Overall Score. Two distinct models will be used: 1) one for High School accountability, and 2) one for Elementary and Middle School accountability.

### **School Performance Index**

#### **High School (see detailed breakdown page 5)**

Indicator #1	Indicator #2	Indicator #3	Indicator #4	Indicator #5	OVERALL SCORE
Student Achievement	Academic Growth	College & Career Readiness	Effective Teachers & Principals	School Climate	
....points	... points	.... points	.... points	... points	... points

#### **Elementary and Middle School (see detailed breakdown page 6)**

Indicator #1	Indicator #2	Indicator #3	Indicator #4	Indicator #5	OVERALL SCORE
Student Achievement	Academic Growth	Attendance	Effective Teachers & Principals	School Climate	
....points	... points	.... points	.... points	... points	.... points

### **AMO Targets and Goals**

Under the proposed model, each school/district would have its own unique AMO goal, and adequate yearly progress would be defined as meeting annual targets toward that goal.

AMO goals and targets would be set as follows:

- For each level (elementary, middle and high school, and district), the Overall Score for all public schools/districts across the state would be averaged, and a standard deviation computed.
- For schools/districts below the **Growth Transition** level, which would be the 70<sup>th</sup> percentile, the annual AMO target would require an increase of the school's/district's Overall Score by  $\frac{1}{4}$  of a standard deviation. In a four-year period, the goal would be to move each school/district up one full standard deviation from its unique starting point.
- For schools/districts above the **Growth Transition** level, the AMO target would be half of the goal set for schools under the Proficient line.



A distribution would be calculated to locate the 70<sup>th</sup> percentile based on all public schools' performance on the School Performance Index in the 2012-13 school year. That measure will remain in place until 2014-15, at which point the new statewide summative assessment will be used and a new distribution would be set. After 2014-15, the distribution and Proficient level would be reset every four years in order to encourage continuous improvement by all schools.

### AMO Simulated Data for Illustrative Purposes\*

Sample Scores	Average (Mean)	Standard Deviation (STDEV)	AMO for schools scoring below proficient (STDEV/ 4 year goal)	AMO for schools scoring at or above proficient (0.5 X STDEV/ 4 year goal)	70th Percentile
	70	8	2	1	74.0
Example	Baseline	Year 1	Year 2	Year 3	Year 4
School A (Low)	59.0	61.0	63.0	65.0	67.0
School B (Average)	69.0	71.0	73.0	75.0	76.0
School C (High)	77.8	78.8	79.8	80.8	81.8

**School A** started out more than one standard deviation below the 70th percentile. The AMO for this school in year 1 will be the baseline score plus 1/4 standard deviation and will increase by 1/4 standard deviation each year after.

**School B** started out less than one standard deviation below the 70th percentile. The AMO for this school will be the baseline score plus 1/4 standard deviation in year 1 and will increase by 1/4 standard deviation each year after until the AMO reaches the 70th percentile. For each year after this, the AMO will be an increase of 1/8th standard deviation.

**School C** started out above the 70th percentile score. The AMO for this school will be the baseline score plus 1/8th standard deviation and will increase by 1/8th standard deviation each year after.

\*Further analysis of data to be done



### **Phase-In of School Performance Index**

<b>2011-12</b>	Existing accountability model used for final year
<b>2012-13</b>	School Performance Index in place with all indicators <u>except</u> Effective Teachers and Principals at both levels, and Growth at High School level
<b>2013-14</b>	School Performance Index same indicators as in 2012-13
<b>2014-15</b>	<p>Add Growth indicator at High School level (assuming valid assessment tool available)</p> <p>Add Effective Teachers and Principals indicator (assuming proper evaluation instruments/models for determining student growth in place)</p> <p>Reset distribution and Proficient level</p>



## INDEX & INDICATORS: High Schools

At the High School level, the School Performance Index will include encompass the following key indicators:

2012-13 & 2013-14 Points: 45	2012-13 & 2013-14 Points: 0	2012-13 & 2013-14 Points: 45	2012-13 & 2013-14 Points: 0	2012-13 & 2013-14 Points: 10
2014-15 Points: 25	2014-15 Points: 25	2014-15 Points: 20	2014-15 Points: 20	2014-15 Points: 10
<b>Indicator #1: Student Achievement</b>  --Percent proficient or higher in reading and math in grade 11 on state assessment  Calculation includes: --Gap Group score --Non-Gap Group score --Unduplicated count	<b>Indicator#2: Academic Growth</b>  --THIS PIECE NOT IN PLACE UNTIL 2014-15 when appropriate assessment tool expected to be available.  --Also looking at earlier high school assessment options – 9 <sup>th</sup> or 10 <sup>th</sup> grade.	<b>Indicator #3: College &amp; Career Ready</b>  --Graduation rate --Percent of students pursuing postsecondary 18 months after graduation --Percent of ACT or National Career Readiness/Work Keys scores at college/career ready level	<b>Indicator #4: Effective Teachers &amp; Principals</b>  --Aggregate number of teachers in each of four categories: Unsatisfactory, Basic, Proficient, Distinguished  --THIS PIECE NOT IN PLACE UNTIL 2014-15	<b>Indicator #5: School Climate Survey</b>  --Content of survey needs to be determined
Implemented in 2012-13	Implemented in 2014-15	Implemented in 2012-13	Implemented in 2014-15	Implemented in 2012-13



## INDEX & INDICATORS: Elementary & Middle Schools

At the Elementary and Middle School levels, the School Performance Index will include encompass the following key indicators:

2012-13 & 2013-14 Points: 35	2012-13 & 2013-14 Points: 35	2012-13 & 2013-14 Points: 20	2012-13 & 2013-14 Points: 0	2012-13 & 2013-14 Points: 10
2014-15 Points: 25	2014-15 Points: 25	2014-15 Points: 20	2014-15 Points: 20	2014-15 Points: 10
Indicator #1: <b>Student Achievement</b>  --Percent proficient or higher in reading and math in grades 3-8 on state assessment  Calculation includes: --Gap Group score --Non-Gap Group score --Unduplicated count	Indicator#2: <b>Academic Growth</b>  --Value added (linear regression) model based on student growth – factoring for certain variables	Indicator #3: <b>Attendance</b>	Indicator #4: <b>Effective Teachers &amp; Principals</b>  --Aggregate number of teachers in each of four categories: Unsatisfactory, Basic, Proficient, Distinguished  --THIS PIECE NOT IN PLACE UNTIL 2014-15	Indicator #5: <b>School Climate Survey ... points</b>  --Content of survey needs to be determined
Implemented in 2012-13	Implemented in 2012-13	Implemented in 2012-13	Implemented in 2014-15	Implemented in 2012-13



### INDICATOR #1: Student Achievement

At the High School level, the student achievement score will be based on the percent of students scoring proficient or advanced on the statewide assessment in reading and math delivered in 11<sup>th</sup> grade.

At the Elementary and Middle School levels, the student achievement score will be based on the percent of students scoring proficient or advanced on the statewide assessment in reading and math in grades 3-8.

Points will be given for two separate groups – the “Gap Group” and the “Non-Gap Group.” Points for the Gap Group and Non-Gap Group will be weighted and summed to determine the final score for student achievement.

#### What is the Gap Group?

The Gap Group is an **aggregate count of student groups in our state that have historically experienced achievement gaps**. At this time, South Dakota will include the following student groups in its Gap Group: Black, Native American, Hispanic, Economically Disadvantaged, Students with Disabilities, Limited English Proficient, Migrant.

To calculate the combined student Gap Group, unduplicated counts of students who score proficient or higher on the statewide assessment and are in the identified student groups would be summed. This will yield a **single gap number** of proficient or higher students in the “Gap Group,” **with no student counting more than one time**, and all students in included groups being counted once.

#### **Example: Unduplicated Count**

- Addy -- Special Education and Economically Disadvantaged subgroups. Scores Proficient.
- Marcus – Limited English Proficient and Economically Disadvantaged subgroups. Scores Basic.
- Cheyenne – Native American. Scores Advanced.

Based on the above, an unduplicated count would show three total students with two of the students (Addy and Cheyenne), or 66.66 percent, counting as proficient or higher in the Gap Group.

The Non-Gap Group includes all students not in the Gap Group. Those scoring proficient or higher in the Non-Gap Group would be included in the student achievement calculation.

Under the proposed system, the N-size will be 10. Using an aggregated Gap Group, this means almost every school in the state will have a focus on students in Gap Groups. Individual subgroups of students will still be disaggregated and reported, but not for accountability purposes.



### Example: Student Achievement Calculation\*

Step:	1	2	3	4
	Weight as %	Weighted Index Points	% Proficient/Advanced	Score (Weighted Points X % Prof/Adv)
Gap	50%	12.5	76%	9.50
NonGap	50%	12.5	88%	11.00
TOTAL	100%	25		<b>20.50</b>

**5**

**Total points for Student Achievement Indicator**

\*Weighting of Gap and Non-Gap groups needs to be determined

### INDICATOR #2: Academic Growth

At the High School level, a Growth calculation will not be used for accountability purposes at the present time. When additional data points that could be used to accurately measure growth are in place, the state could consider a growth model for high school.

At the Elementary and Middle School levels, a Growth calculation will be used for accountability purposes.

South Dakota is proposing a Value Added Model for Growth (sometimes called a Linear Regression model). This is the type of model used in the state's Teacher Incentive Fund grant, which affords us some data and experience.

The Council of Chief State School Officers offers this definition of a Value Added Model: A Value Added Model is one type of growth model that uses "student background characteristics and/or prior achievement and other data as statistical controls in order to isolate the specific effects of a particular school, program or teacher on student academic progress. The main purpose of VAMs is to separate the effects of non-school-related factors (such as family, peer, and individual influence) from a school's performance at any point in time so that student performance can be attributed appropriately. A value added estimate for a school is simply the difference between its actual growth and its expected growth."

### Example: Academic Growth Calculation

% Students exceeded projected growth	80%
X Possible Index points	25
Score	20

**TOTAL points for Academic Growth Indicator**



### INDICATOR #3: College & Career Readiness OR Attendance

At the Elementary and Middle School levels, the Indicator will be attendance rate. A school's attendance percentage would be multiplied by the total points for this category to come up with a score for this Indicator.

**EXAMPLE:** School A has an attendance rate of 90%. If total points for this Indicator are 20, School A's score for this Indicator would be 18.

At the High School level, the College & Career Readiness score will be based on the factors noted below. Each of the factors will be weighted.

- 1) Graduation rate – For accountability purposes, South Dakota is proposing to use a five-year graduation rate calculation. For reporting purposes, the state would use the four-year cohort rate required by the federal government.
- 2) Percent of students pursuing postsecondary 18 months after graduation – This calculation includes data from any postsecondary facility that reports to the National Student Clearinghouse.
- 3) Percent of students whose ACT math sub-score is 20 or above and reading sub-score is 18 or above; or, for those students who don't take the ACT, percent of students whose score is 5 or above in reading and math on ACT's National Career Readiness Certificate/Work Keys

#### Example: College & Career Readiness Calculation

Step 1	2	3	4	5
	Weight as %	Weighted Points	Rate as %	Score
Factors				
• Graduation rate	20%	4	98%	3.92
• % ACT or Work Keys scores at college/career ready level	40%	8	78%	6.24
• % students pursuing postsecondary in 18 months	40%	8	72%	5.76
Total possible points	100%	20		
			15.92	6
			TOTAL points for College/Career Ready Indicator	



#### INDICATOR #4: Effective Teachers & Principals

At both levels, the Effective Teachers & Principals score would be based on the percentage of teachers in the school who perform at the Proficient or Distinguished levels on a statewide evaluation instrument. The percentage of teachers who score at the Proficient or Distinguished levels is multiplied by total possible points.

- ... percent of that performance rating must be based on quantitative measures of student academic growth in one school year.
- .... percent of that performance rating must be based on qualitative components that are measurable and evidence-based.

Much work needs to be done related to this indicator; therefore, it will not be included in the School Performance Index until 2014-15. Work groups will be needed to address both the teacher evaluation piece and the principal standards and evaluation piece, as well as building appropriate assessments for this purpose. While standards are now in place for teachers, there are no such statewide standards for principals.

Finally, South Dakota does not currently have valid and reliable measurements in place that would evaluate individual student growth within an academic year, which could then be tied to teacher and principal performance. At this time, it does appear that SMARTER Balanced products will allow for quantitative measures of student growth for teacher evaluation purposes in English language arts and math (only) by 2014-15. For those teachers in grades and subjects for which there is no state-validated testing measure for the quantitative portion of the evaluation, a district approved assessment using objective measures of teacher effectiveness including student performance on unit or end-of-year tests shall be used.

#### Example: Effective Teachers & Principals Calculation

Step:		1	2
Overall	% Teachers	Score (%)	
Index Points	Proficient &	Teachers	X Overall
Possible	Distinguished	Points)	
20	71%	14.2	
<b>Total Points Effective Teachers/Principals Indicator</b>			



### **INDICATOR #5: School Climate Survey**

At both levels, the score for this Indicator would be measured by a survey distributed to a random sample of key constituents within the school community. The same tool would be used statewide. Survey items would need to be determined with input from the field.

### **Classification of Schools**

Under the proposed accountability model, there would be three classifications of schools that determine recognition or support.

- Exemplary Schools include both 1) high-performing schools whose Overall Score on the School Performance Index is at the 95<sup>th</sup> percentile or higher and 2) high-progress schools that rank in the 95<sup>th</sup> percentile for improvement of Overall Score on the SPI over a period of two years. **All public schools would be eligible.**
- A Focus School is a school whose Overall Score on the School Performance Index is at/or below the 15<sup>th</sup> percentile but above the 5<sup>th</sup> percentile. The total number of Focus Schools must be at least 10 percent of the Title I and Title I eligible schools in the state. Each district with one or more of these schools must implement, for two years, meaningful interventions aligned with the turnaround principles. Applies to **Title I and Title I eligible schools.**
- A Priority School is a school whose Overall Score on the School Performance Index is at/or below the 5<sup>th</sup> percentile. The total number of Priority Schools must be at least five percent of the Title I and Title I eligible schools in the state. Each district with one or more of these schools must implement, for three years, meaningful interventions aligned with the turnaround principles. Applies to **Title I and Title I eligible schools.**

### **Recognition and Support**

Exemplary schools will receive special recognition through a statewide branding effort designed to draw attention to their outstanding performance.

Priority Schools will receive targeted, state- and district-level support to include, among other things: participation in the Academy of Pace-Setting Districts, utilization of Indistar to develop a school transformation plan focused on rapid turnaround indicators, and a four-lens data analysis to strengthen the instructional program based on student needs.

Focus Schools will receive some state- and district-level support, including support for the IndiStar analysis of effective practices.